

**Exemplary overview of the Bachelor's degree program Sustainable Industrial Operations and Business**

Sem.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32										
7	Mobility Innovations [4/5]		Energy Infrastructure [4/5]		Seminar on Sustainable Development [2/4]		Bachelor's Thesis [12]																												26							
6	Smart Manufacturing and Industry 4.0 [4/5]		Data Science and AI [4/5]		Supply Chain Management [4/5]		Enterprise Resource Planning [4/5]		Sustainable Development III: Transformations, Scenarios [4/5]			International Business and Cross-Cultural Communication [4/5]																							30							
5	Internship [24]														Internship Seminar [2/2]		Seminar research studies (VHB) [2/3]																									29
4	Engineering and Design [4/5]		Introduction to Manufacturing Engineering [4/5]		Renewable Energy [4/5]		Sustainable Development II: Standards, Players, Interventions [4/5]			Project Management [4/5]			Studium Generale (Module in German language) [2/2]		Studium Generale (Module in German language) [2/2]		Studium Generale (Module in German language) [2/2]																			31						
3	Automatic Control Engineering [4/5]		Network Communication / IoT [6/6]		Procurement, Manufacturing and Logistics [4/6]		Marketing and Sales [4/5]		Accounting [4/5]			German/Foreign Language* III [4/4]																								31						
2	Mathematics for Engineers II [8/10]				Applied Physics [6/7]		Electronics and Measurement Engineering [4/5]		Software Development and Coding [4/5]			German/Foreign Language* II [4/4]																								31						
1	Mathematics for Engineers I [6/6]		Principles of Electrical Engineering [4/5]		Fundamentals of Computer Science [4/5]		Principles of Business Administration and Economics [6/7]			Sustainable Development I: Principles [4/5]			German/Foreign Language* I [4/4]																							32						
	<b>ECTS credits</b>		<b>5</b>		<b>10</b>		<b>15</b>		<b>20</b>			<b>25</b>			<b>30</b>																											
	<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <p><span style="display: inline-block; width: 15px; height: 15px; background-color: #cccccc; border: 1px solid black; margin-right: 5px;"></span> Mathematics</p> <p><span style="display: inline-block; width: 15px; height: 15px; background-color: #ffff00; border: 1px solid black; margin-right: 5px;"></span> Engineering and natural sciences</p> <p><span style="display: inline-block; width: 15px; height: 15px; background-color: #ffcc99; border: 1px solid black; margin-right: 5px;"></span> Information Technology and Data Science</p> <p><span style="display: inline-block; width: 15px; height: 15px; background-color: #ff9999; border: 1px solid black; margin-right: 5px;"></span> Business administration</p> </div> <div style="width: 48%;"> <p><span style="display: inline-block; width: 15px; height: 15px; background-color: #99ccff; border: 1px solid black; margin-right: 5px;"></span> Sustainability</p> <p><span style="display: inline-block; width: 15px; height: 15px; background-color: #ccff99; border: 1px solid black; margin-right: 5px;"></span> Languages and (inter)national culture</p> <p><span style="display: inline-block; width: 15px; height: 15px; background-color: #ffffff; border: 1px solid black; margin-right: 5px;"></span> Practical Modules and bachelor's thesis</p> <p><span style="display: inline-block; width: 15px; height: 15px; background-color: #cccccc; border: 1px solid black; margin-right: 5px;"></span> General Studies</p> </div> </div>		<b>Total</b>																									<b>210</b>														
	[SWS / ECTS]															* For non-German speakers: German as a foreign language For German speakers: 2nd foreign language																										